REMARKS

With the entry of the amendment, claims 1-6, 22-28 and 57-60 are pending. Claims 57-60 are new. The amendments are fully supported by the specification as originally filed and introduce no new matter. Specifically, support for claim 57 can be found throughout the specification, and specifically on page 9, lines 10-19, page 12, lines 27-29 and page 15, line 1 to page 19, line 28. Support for claims 58-60 can be found on page 13, lines 11-12.

In the Office Action mailed November 16, 2004, all pending claims were rejected on various grounds. In view of the arguments below, Applicants respectfully request withdrawal of the rejections and allowance of the claims. Applicants thank the Examiner for withdrawal of the obviousness type double patenting rejections of claims 1-6 and 22-28.

Rejections under 35 U.S.C. 102(b)

Claims 1-4 were rejected under 35 U.S.C. 102(b) as being anticipated by Josephson (U.S. Patent No. 4,672,040). Examiner asserted that the structure of the particles of Applicants' invention were identical to the particles of Josephson and that the amendment made regarding the amount of target material bound per milligram of particles, while not disclosed in Josephson, remained anticipated by Josephson based on the structural identity of the particles.

Applicants respectfully assert that the particles of Josephson and those of the Applicant's invention are not structurally the same.

> "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."
> MPEP § 2131

Applicants respectfully assert that the Examiner has not made a *prima facie* case that the Applicant's invention is anticipated by Josephson, because numerous elements of Applicant's claims are not disclosed, either expressly or inherently, by Josephson. Nowhere does Josephson disclose or suggest particles that are capable of reversibly binding adsorbents, much less the reversible binding of at least 2 micrograms of the target material per milligram of particles. Indeed, in contrast to the reversible binding of the Applicant's invention,

Josephson makes numerous references to the fact that adsorbents are covalently bound, or chemically coupled to the particles.

For example, at column 7, lines 25-33 Josephson states, ""magnetic particle" is defined as any particle [...] to which bioaffinity adsorbents may be covalently coupled;" Column 7 lines 58-65 states, ""coupled magnetic particle" is defined as any magnetic particle to which one or more types of bioaffinity adsorbents are coupled by covalent bonds, which covalent bonds may be amide, ester, ether, sulfonamide, disulfide, azo or other suitable organic linkages depending on the functionalities available for bonding on both the coat of the magnetic particle and the bioaffinity adsorbent(s)". Column 9 lines 27-31 states, "[t]he magnetic particles comprise a magnetic metal oxide core generally surrounded by an adsorptively or covalently bound silane coat to which a wide variety of bioaffinity adsorbents can be covalently bonded through selected coupling chemistries. Column 10, lines 14-16 states "The magnetic particles of this invention can be covalently bonded by conventional coupling chemistries to bioaffinity adsorbents." Column 15, lines 28-32 state "the coupling of antibody to the particle results from an essentially irreversible covalent coupling." (emphasis added).

Therefore, nowhere does Josephson suggest, much less anticipate, the particles of Applicants' invention which bind reversibly to the target material. Indeed, Josephson discloses that the coupling is "essentially irreversible."

Furthermore, there is no hint or suggestion in Josephson that the particles are capable of binding 2 micrograms of the biological target material per milligram of particles, a limitation present in claims 1. Josephson further fails to disclose particles which can be used in "separating the biological material from the complex by eluting the biological target material," the final step of claim 1 (emphasis added). Clearly, the particles of Josephson do not anticipate those of the Applicant's invention.

Applicants respectfully submit that the arguments above overcome the rejection of claim 1 and claims 2-4, which depend from claim 1, and request that these claims be allowed.

Rejections under 35 U.S.C. 103(a)

Claims 3, 5, and 22-27 were rejected under 35 U.S.C. 103(a) as being unpatentable over Josephson (U.S. Patent No. 4,672,040) and Gautsch et al. (U.S. Patent No. 6,613,895).

In the previous Office Action, the Examiner had asserted that Gautsch et al. teaches silica particles capable of binding at least 2 micrograms of a biological target material, and cited to Column 4, lines 49-51 of Gautsch et al. Applicants responded that Gautsch et al.

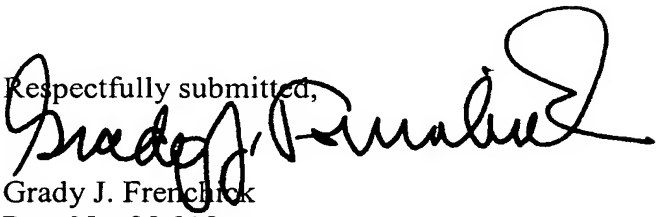
suggests a kit for isolating nucleic acid molecules including *particulate glass in an amount sufficient to bind at least two to three micrograms of nucleic acid* (emphasis added). In contrast, independent claims 1 and 22 are drawn to a method that employs silica or siliceous oxide coated magnetic particles capable of binding 2 micrograms biological target material or plasmid DNA per milligram of particle. Whereas claims 1 and 22, and their dependent claims 2-6 and 23-28 require particles having a minimum binding capacity expressed as a minimum mass of bound material per unit mass of particles, Gautsch et al. refers to a mass of particles sufficient to recover a minimum mass of nucleic acids. Gautsch et al. provides no teaching as to the mass of biological target material bound per unit mass of particles.

These arguments were considered moot by the Examiner in view of the Examiner's new interpretation of the teachings of Josephson. Applicants submit that the current arguments made with respect to the teachings of Josephson obviate the Examiner's assertion that the particles of Josephson and Applicant are structurally identical. Applicants reassert the arguments above that claims 3, 5, and 22-27 are patentable over Josephson and Gautsch et al.

In view of the foregoing, Applicants respectfully submit that the claims are patentable over the cited art, and request withdrawal of the rejections and allowance of the claims.

No fee is believed due in connection with this submission. If a fee is owed, please charge such fee to Deposit Account No. 50-0842.

Respectfully submitted,



Grady J. Frenchick
Reg. No. 29,018

File No. 016026-9148-03
Michael Best & Friedrich LLP
One South Pinckney Street
P. O. Box 1806
Madison, WI 53701-1806
(608) 257-3501

Q:\CLIENT\016026\9148\B0377552.2